NETWORK AND SYSTEM ADMINISTRATION (NADM)

NADM 140 Fundamentals of Windows Operating System
(4 Credits, Fall)
Fundamentals of installation, configuration, administration, and support of the latest Windows client operating system. Includes configuring hardware and peripheral devices, sharing resources, network connectivity, security, and maintenance. Focus on improved methods to execute current functions. PREREQ: Network and System Administration major. COREQ: NADM 142 and NADM 144. PRE/COREQ: Placement into MATH 123 or concurrent enrollment in any GEM 3 course. *(2 lecture hours, 4 lab hours, 4 credits)*

NADM 142 Network Services
(4 Credits, Fall)
Examines networks of small/medium business environments. Introduces routing and remote access; addressing and network services, including servers providing email; and web-space and authenticated access. Provides skills for entry-level help desk and network technician jobs. COREQ: NADM 140 and NADM 144. *(2 lecture hours, 4 lab hours, 4 credits)*

NADM 144 Routing and Switching Environment
(4 Credits, Fall)
Equipment, applications, and protocols of enterprise networks with a focus on switched networks, IP telephony requirements, and security. Includes advanced routing protocols such as Enhanced Interior Gateway Routing Protocol (EIGRP) and Open Shortest Path First (OSPF) Protocol. Hands-on exercises include installation, configuration, and troubleshooting. COREQ: NADM 140 and NADM 142. *(2 lecture hours, 4 lab hours, 4 credits)*

NADM 155 Network Server Management
(4 Credits, Spring)
Deployment and management of Windows-based servers for enterprise organizations. Includes essential tools to configure, manage and secure servers and clients in a basic network infrastructure. PREREQ: NADM 140, NADM 142, and NADM 144 (with a grade of C or higher). COREQ: NADM 157 and NADM 159. *(2 lecture hours, 4 lab hours, 4 credits)*

NADM 157 Linux System Administration
(4 Credits, Spring)
Installation and configuration of a Linux operating system. Focuses on common tasks performed by system administrators such as managing users and groups, configuring DHCP and DNS services, sharing files across multiple platforms, and troubleshooting and repairing problems related to the operating system. PREREQ: NADM 140, NADM 142, and NADM 144. COREQ: NADM 155 and NADM 159. *(2 lecture hours, 4 lab hours, 4 credits)*

NADM 159 Security
(4 Credits, Spring)
Key security concepts including security threats, securing network resources, encryption technologies, securing communications and applications, and incident response. PREREQ: NADM 140, NADM 142, and NADM 144. COREQ: NADM 155 and NADM 157. *(2 lecture hours, 4 lab hours, 4 credits)*

NADM 260 Network Infrastructure
(4 Credits, Fall)
Plan, implement, manage, and maintain IP addressing, name resolution, network security, routing, and remote access. PREREQ: NADM 155, NADM 157, and NADM 159. COREQ: NADM 262 and NADM 264. *(2 lecture hours, 4 lab hours, 4 credits)*

NADM 262 Directory Services
(4 Credits, Fall)
Plan, implement, manage, and maintain a directory services infrastructure and group policy strategies. PREREQ: NADM 155, NADM 157, and NADM 159. COREQ: NADM 260 and NADM 264. *(2 lecture hours, 4 lab hours, 4 credits)*

NADM 264 Email Systems
(4 Credits, Fall)
Implementing, troubleshooting, and maintaining email systems in a directory services environment. PREREQ: NADM 155, NADM 157, and NADM 159. COREQ: NADM 260 and NADM 262. *(2 lecture hours, 4 lab hours, 4 credits)*

NADM 266 Database Administration
(4 Credits, Spring)
Implementing, troubleshooting, and administering databases in a directory services environment. PREREQ: NADM 260, NADM 262, and NADM 264. COREQ: NADM 268 and NADM 271. *(2 lecture hours, 4 lab hours, 4 credits)*

NADM 268 Advanced Infrastructure
(4 Credits, Spring)
Plan, implement, manage, and maintain an infrastructure in an enterprise environment. PREREQ: NADM 260, NADM 262, and NADM 264. COREQ: NADM 266 and NADM 271. *(2 lecture hours, 4 lab hours, 4 credits)*

NADM 271 Virtualization Technologies
(4 Credits, Spring)
Intensive hands-on training that focuses on installing, configuring, and managing VMware vSphere, which includes VMware ESXi and VMware vCenter Server. This course prepares you to administer a vSphere infrastructure for an organization of any size and forms the foundation for most other VMware technologies in the software-defined data center. PREREQ: NADM 260, NADM 262, and NADM 264. COREQ: NADM 266 and NADM 268. *(2 lecture hours, 4 lab hours, 4 credits)*

NADM 280 Cloud Technologies
(4 Credits, Fall)
Examination of cloud technologies as part of broader systems operations including those that support the changing cloud market as more organizations depend on cloud-based technologies to run mission-critical systems, now that hybrid and multi-cloud systems have become the norm. This course aligns with the objectives of the CompTIA Cloud+ certification. PREREQ: NADM 260, NADM 262, NADM 264, NADM 266, NADM 268, and NADM 271; or PERM/CHAIR. *(2 lecture hours, 4 lab hours, 4 credits)*

NADM 281 Fundamentals of Microsoft PowerShell and Azure
(4 Credits, Fall)
This two-part course will teach students the fundamentals of both Microsoft PowerShell and Azure. The first part of the class will cover Windows PowerShell, a cross-platform task automation and configuration management framework consisting of a command-line shell and scripting language that is designed to deal with objects and extract information. Students will learn the fundamentals of PowerShell, including how to develop basic and advanced PowerShell scripts. The second part of the course will cover Azure, Microsoft's open and flexible cloud computing platform which allows businesses to build, manage, and deploy applications on a massive, global network using familiar tools and frameworks. Students will study the fundamentals of Microsoft Azure including types of cloud models; core services and solutions; and security, identity, privacy, and compliance features. This course aligns with the objectives of the Microsoft AZ-900 certification exam. PREREQ: NADM 260, NADM 262, NADM 264, NADM 266, NADM 268, and NADM 271; or PERM/CHAIR. PRE/COREQ: NADM 280 and NADM 282. *(2 lecture hours, 4 lab hours, 4 credits)*

NADM 282 Microsoft Azure Administrator
(4 Credits, Fall)
Study of the administrator functions in Microsoft Azure. Includes developing and deploying Azure managed cloud storage and computing resources, managing virtual networking resources, and creating and managing Azure identities. This course aligns with the objectives of the Microsoft AZ-104 certification exam. PREREQ: NADM 260, NADM 262, NADM 264, NADM 266, NADM 268, and NADM 271; or PERM/CHAIR. PRE/COREQ: NADM 280 and NADM 281. *(2 lecture hours, 4 lab hours, 4 credits)*

NADM 283 Microsoft 365 Messaging Services
(4 Credits, Spring)
Deploy; configure; manage; troubleshoot; and monitor recipients, permissions, mail protection, mail flow, and public folders in Microsoft 365 Messaging hybrid and cloud enterprise environments. This course includes the domain objectives for Microsoft Exam MS-203: Microsoft 365 Messaging. PRE/COREQ: NADM 280, NADM 281, and NADM 282. *(2 lecture hours, 4 lab hours, 4 credits)*

Refer to How to Read Course Descriptions for an explanation of elements found in the course descriptions above.